ATTACHMENT P

Ashland County Population Forecast
Vierbicher Associates, Inc. Madison, Wisconsin.

Ashland County: Forecasts by Jurisdiction

	Town of Agenda	Town of Ashland	Village of Butternut	Town of Chippewa	Town of Gingles	Town of Gordon	Town of Jacobs	Town of La Pointe	Town of Marengo	City of Mellen	Town of Morse	Town of Peeksville	Town of Sanborn	Town of Shanagolden	Town of White River	Total (Ashland County)
Growth Rate From 1990 to 2000	-1.40%	0.60%	-0.30%	0.70%	2.70%	1.70%	-0.60%	5.30%	2.50%	-1.40%	1.50%	0.50%	2.45%	-1.50%	1.50%	
Additional Population 2006 to 2025	*-120*	*80*	*-20*	*60*	*502*	*149*	*-94*	*549*	*246*	*-200*	*189*	*20*	*833*	*-40*	*326*	*2480*
Additional Housing Units 2006 to 2025	*-33*	*58*	*-4*	*70*	*266*	*243*	*5*	*1733*	*166*	*-85*	*179*	*29*	*521*	*-25*	*220*	*3343*
Selected Growth Rate 2006 to 2025	0.50%	0.60%	0.30%	0.70%	3.10%	1.70%	0.10%	6.00%	2.10%	0.30%	1.50%	0.50%	2.45%	0.50%	1.50%	
Additional Population																
2006 to 2010	15	20	5	15	118	33	5	103	42	15	42	5	171	5	73	*667*
2011 to 2015	15	20	5	15	138	35	5	137	46	15	45	5	195	5	78	*759*
2016 to 2020	15	20	5	15	160	39	5	185	52	15	49	5	220	5	84	*874*
2021 to 2025	15	20	5	15	187	42	5	246	57	15	53	5	247	5	91	*1008*
2006 to 2025	*60*	*80*	*20*	*60*	*603*	*149*	*20*	*671*	*197*	*60*	*189*	*20*	*833*	*20*	*326*	*3308*
Additional Households																
2006 to 2010	16	12	4	9	51	20	14	56	19	13	19	4	79	5	40	*361*
2011 to 2015	17	11	4	10	61	22	15	76	22	12	22	4	95	4	45	*420*
2016 to 2020	18	13	4	10	72	25	15	105	25	13	23	4	113	5	52	*497*
2021 to 2025	20	12	4	10	87	28	17	142	28	14	27	4	133	6	61	*593*
2006 to 2025	*71*	*48*	*16*	*39*	*271*	*95*	*61*	*379*	*94*	*52*	*91*	*16*	*420*	*20*	*198*	*1871*
Additional Housing Units																
2006 to 2010	26	14	4	16	59	51	20	310	27	15	38	7	98	12	45	*742*
2011 to 2015	27	14	5	18	71	57	22	420	32	14	43	7	118	10	50	*908*
2016 to 2020	28	15	4	18	83	64	21	582	36	15	45	8	140	13	57	*1129*
2021 to 2025	31	15	5	18	101	71	25	786	41	16	53	7	165	15	68	*1417*
2006 to 2025	*112*	*58*	*18*	*70*	*314*	*243*	*88*	*2098*	*136*	*60*	*179*	*29*	*521*	*50*	*220*	*4196*

ATTACHMENT Q

Kakagon Slough Cabins and Sample Results. Memo to File. July 1997. Ledder, Tracey.

Maps of cabin locations, Bad River Band of Lake Superior Tribe of Chippewa Indians, 2005.

Example photos of conditions at some cabins, Bad River Natural Resource Staff, summer 2004.

Memorandum
To: Ervin Soulier, Natural Resource Manager
From: Tracey Ledder, Water Resources Specialist
RE: Kakagon Sloughs Cabins & Samples
CC: Legal department

On July 28 and 29, 1997 myself, Matt Eitrem (Water Resources Technician), Joe Dan Rose (Fisheries), Vern Stone and Kenneth Rusk (GLIFWC Wardens) and James Weinzierl (U.S. Army Corps of Engineers) investigated approximately 25 cabins in the Oak Point and Sand Cut areas of Kakagon Sloughs. We observed the majority of the cabins to have pipes disposing of kitchen water directly to wetlands, solid waste piles of old metal objects and other household appliances, and outhouses that either dumped human waste directly to wetlands or were located in places where the groundwater table probably intersects with the outhouse hole.

Other issues encountered include a new well on a property on Wood Creek, an underground storage tank and leaking fuel oil container on a property owned by a Ray Blosik (spelling unsure), and numerous docks and shore-line changes.

Several samples were taken around the Oak Point cabins and open water off Oak Point. These samples were analyzed for phosphate, nitrate and fecal coliforms in the Water Resources Lab (see Table 1). Two samples were taken of soil/sediments for total petroleum hydrocarbon (TPH) analysis, one below a solid waste pile and one below a fuel oil drum at the Bradle property. These samples can be held and sent to a commercial lab for analysis if required.

Table 1

Location	Nitrates (mg/L)	Phosphates (mg/L)	Fecal coliforms (CFU/100ml)
Open water (Oak Point)	0.0	0.01	1
Bradles cabin	1.7	0.43	7
Cabin West of Nelson	2.9	0.45	9
Le Plavy cabin	0.9	0.11	37
Kakagon Sloughs (July)	0.4	0.01	10
Phosphate QC (0.04)	-	0.02	-
Nitrate QC (0.6)	0.6	-	-

The samples listed in Table 1 were taken in the wetlands behind open bottom outhouses in the case of the Bradle cabin and the cabin west of Nelson's. The Le Plavy cabin had a dug outhouse and the sample was taken about 100 feet from the cabin and outhouse itself, in the wetland. The July sample in Kakagon Slough comes from the monthly monitoring results. None of the cabins were being used on the day samples were taken. The cabin west of Nelson's had been used the previous two days. Bradle's cabin had been used for a few hours only that morning with no use the previous week. The Le Plavy cabin usage was unknown.

In comparing the results from the Kakagon Slough sample and the cabins, there appears to be a nutrient enrichment from the open outhouses and kitchen drainages. The cabins with open outhouses had a greater affect. Fecal coliforms were not found to be very high. This is probably because fecal coliforms do not survive long in natural waters.

The sample results show some affect on wetland waters. However, the most important point, as I understand it, is that these open bottom outhouses are in violation of the Clean Water Act in that no waste may be discharged directly to waters of the United States. The underground storage tank, leaking fuel oil AST, solid waste piles and docks are also environmental issues that should be addressed.

ATTACHEMENT R

Best Management Practices Monitoring Report 2002. Wisconsin Department of Natural Resources. Executive summary.

Wisconsin's Forestry Best Management Practices for Water Quality

The 2002 Statewide BMP Monitoring Report

Brian Breunig
Dale Gasser
Kyle Holland

Wisconsin Department of Natural Resources
Division of Forestry
PUB-FR-252-2003

Executive Summary

Best management practices (BMPs) are practical and cost-effective guidelines to help loggers, equipment operators, landowners and natural resource managers protect water quality during forestry operations. In response to federal legislation, Wisconsin's Forestry BMP program was developed in 1995 by a partnership of many interest groups led by the Wisconsin Department of Natural Resources (DNR), Bureau (currently Division) of Forestry. This program is based on *Wisconsin's Forestry Best Management Practices for Water Quality: A Field Manual for Loggers, Landowners and Land Managers*. The program entails forestry BMP education, training workshops and BMP monitoring of timber sales.

The BMP program began with statewide monitoring during 1995-1997. In fall 2002, statewide monitoring was conducted again, with a total of 85 sales monitored. The key objectives of the BMP monitoring were to determine the extent to which BMPs were being applied throughout Wisconsin, the effectiveness of properly applied BMPs in protecting water quality and the effects of not applying BMPs where needed.

BMP monitoring consisted of field inspecting timber sales from six categories of land ownership: federal (3 sites were monitored in 2002), state (2), county (6), tribal (6), private industrial (8) and non-industrial private (60). Monitoring utilized visual assessments and professional judgments. Important characteristics of the 2002 monitoring methodology were:

- Monitoring was conducted using eight teams comprised of approximately six individuals from a variety of interest groups and areas of expertise.
- All team members were required to attend a BMP monitoring workshop in July to ensure consistent interpretations and methods among teams.
- Timber sales were randomly selected from a statewide database created from cutting notices, DNR tax law records and aerial surveys.
- To be an eligible site for monitoring, harvesting needed to occur on a wetland or within 200 feet of a lake or stream. Harvesting on the site also needed to be completed in 2001 or 2002.

Information from the monitored sales was collected and analyzed. Results are detailed in chapter three of this report. Highlights include:

- BMPs were correctly applied 86% (± 6%) of the time where needed on Wisconsin timber sales where harvesting occurred within 200 feet of a lake or stream, or on a wetland.
- When BMPs were applied where needed, 96% (± 6%) of the time monitoring teams observed no adverse impact to water quality.
- The frequencies of correct application of BMPs where needed for *Fuels, Lubricants, Wastes and Spills* (98% ± 7%) and *Timber Harvesting* (94% ± 3%) were significantly above the overall 86% (± 6%) mean.
- When BMPs were not applied where needed, 27% (± 8%) of the teams observed *no adverse impact* to water quality, 49% (± 12%) noted a *minor impact* rating and 26% (± 15%) recorded a *major impact*.
- Non-industrial private forests (NIPF) enrolled in a forest taw law program scored better with respect to the application of BMPs than NIPF lands not enrolled.

These overall results are very similar to the 1995-1997 study and indicate that Wisconsin has implemented an effective forestry BMP program. It should remain voluntary, combining existing guidelines and regulations with BMP education and training.